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ABSTRACT

This is one of a series of Education Papers issued periodically by the Education Department of the Department for International Development. Each paper represents a study or piece of commissioned research on some aspect of education and training in developing countries. This study was commissioned by the Overseas Development Administration (subsequently re-named Department for International Development) in January 1996, as a follow-up to the 1994 pilot project of the African Journals Distribution Program. Each year for a period of 3 years (1996 to 1998), data were collected on the use made of African-published journals in 2 universities in Africa, the University of Ghana (UGL) and the University of Zambia (UNZA). The aims of the survey were to: discover what use is made of African-published journals; evaluate their impact on research; and compare the use made of African-published journals with those published elsewhere. Data were collected by interview/questionnaire with the academic staff in two faculties/schools in each university; an analysis of journals cited in projects, theses and academic staff publications from the same faculties/schools; and a count of journals used in the university libraries. The findings presented in tables in this report are the mean average of the findings of each of the 3 years. In some cases, data were only collected for 1 or 2 of the years and, where appropriate, this is indicated. Findings for UGL and UNZA are given separately. In general, there was no significant difference between the yearly results. The study reveals that, although useful and wanted, African-published journals will not attain their full impact on teaching and research in African universities unless they become more easily accessible and more readily available. Recommendations are given, all in the context of maximizing journal use in African universities and, in particular, the use of journals published in Africa. Data collection instruments are appended. (Contains 13 references.) (AEF)

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DFID Department for International Development

Report

ED 455 832

EDUCATION RESEARCH

AFRICAN JOURNALS

An evaluation of the use made of African-published journals in African universities

A.A. Alemna
Vitalicy Chifwepa
Diana Rosenberg

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Department For International Development

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DEPARTMENT FOR INTERNATIONAL DEVELOPMENT

EDUCATION PAPERS

This is one of a series of Education Papers issued from time to time by the Education Department of the Department For International Development. Each paper represents a study or piece of commissioned research on some aspect of education and training in developing countries. Most of the studies were undertaken in order to provide informed judgements from which policy decisions could be drawn, but in each case it has become apparent that the material produced would be of interest to a wider audience, particularly those whose work focuses on developing countries.

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PREFACE

This study was commissioned by the Overseas Development Administration (subsequently re-named Department for International Development) in January 1996, as a follow-up to the 1994 pilot project of the African Journals Distribution Programme. (The report evaluating this project is published by and available from DFID.) All costs of the study were met by the Department.

Data was collected each year for a period of three years, 1996 to 1998, on the use made of African-published journals in two universities in Africa. Co-ordination, design of common data collection instruments and data analysis were undertaken by the International African Institute. In April 1999, the co-ordinator and two local researchers met in London to discuss the findings. This report is the result of that meeting.

Diana Rosenberg
August 1999

AUTHORS

Professor A. A. ALEMNA
Head
Department of Library and Archival Studies
University of Ghana
P. O. Box 60
Legon
Ghana

E-mail: dlas@libr.ug.edu.gh

Vitalicy CHIFWEPA
Head
Department of Library and Information Studies
School of Education
University of Zambia
Lusaka
Zambia

E-mail: vchifwepa@edu.unza.zm

Diana ROSENBERG
International African Institute
School of Oriental and African Studies
Thornhaugh Street
Russell Square
London
WC1H 0XG
UK

E-mail: drosenberg@gn.apc.org

ABBREVIATIONS AND ACRONYMS

AAAS	American Association for the Advancement of Science
AAS	African Academy of Sciences (Nairobi, Kenya)
AERC	African Economic Research Consortium (Nairobi, Kenya)
AJDP	African Journals Distribution Programme
AJSDC	African Journals Support and Development Centre (AAS, Nairobi, Kenya)
APEX	African Periodicals Exhibit (Zimbabwe International Book Fair)
CABI	Centre for Agriculture and Biosciences International
Danida	Danish International Development Assistance
DFID	Department for International Development (UK)
IAI	International African Institute (London, UK)
ICRAF	International Centre for Research in Agroforestry (Nairobi, Kenya)
ICT	Information and communication technologies
IFLA	International Federation of Library Associations and Institutions
SDI	Selective dissemination of information
TOC	Table of contents
UGL	University of Ghana, Legon
UNZA	University of Zambia

CHAPTER ONE

INTRODUCTION

Rationale for the research

In recent years publishing outlets in Africa have dwindled. University presses have declined and many once renowned periodicals and journals have ceased publication or been reduced in size or frequency. University library acquisitions budgets have been cut. Research is suffering, because the means to publish research are lacking and the results on which to develop further research are not disseminated. Yet indigenous publication is essential to the emergence of African academic enterprise. It cannot be replaced by publication in the West. The marginalization and under-representation of African scholarship within both the field of African studies and the production of knowledge generally is one of the effects.

A recognition of the importance of indigenous publication to African scholarship has led to a considerable number of initiatives to strengthen the African academic publishing sector. These have been chiefly in the areas of publication and distribution. Examples are:

- *Direct support for the publication of individual scholarly journals:* many of Africa's journals now rely on donor subsidies. An example is the support provided by Sida:SAREC to the publication of 13 journals in Ethiopia. This support started in 1985.

- *APEX*: an annual exhibition of African journals launched at the Zimbabwe International Book Fair in 1993. In 1997, 135 titles published in 22 African countries were included. The catalogue of the exhibit is widely distributed.

- *African Journals Distribution Programme (AJDP):* a scheme through which scholarly journals published in African countries are made available to scholars and academics in other African countries, by purchasing the titles on behalf of university libraries. In 1997, 34 titles from 20 countries were distributed to 20 African university libraries in 9 countries of Anglophone Africa. In 1998, 10 additional titles and 10 additional libraries were added to the programme. In 1999, an expansion into Francophone Africa is underway, with the inclusion of 15 titles and 15 university libraries from these countries.

- *African Journals Support and Development Centre (AJSDC):* since the end of 1997 the management of both APEX and AJDP has been transferred to Kenya. The new Centre aims to carry out a number of additional support programmes, including education and training.

- *Handbook and Workshops:* since the publication of the pilot edition of Hans Zell's *A Handbook of Good Practice in Journal Publishing* in 1996, three workshops have been held in Africa. A second edition of the handbook was published in 1998.

- *African Journals Online:* this pilot project, undertaken in 1997/1998, aims to promote the use and awareness of African-published journals by offering access via the Internet to either tables of contents or the full text of journals in science, technology and medicine.

As a result of these and other initiatives, chiefly taking place in the countries of Anglophone Africa, journals published in Africa are now available for consultation and use throughout the continent.

The main rationale for providing assistance to African-published journals is that such support will contribute to the improvement of the quantity and quality of research taking place in Africa, through the provision of reliable and regular intra-African channels of communication. It will reduce Africa's dependence on the West and encourage appropriate research leading to sustainable economic and social development.

There has however been no systematic survey which documents the use that is made of African-published journals and their impact on research. The evaluation of the pilot project of AJDP indicated that such journals were well read and had been used as recommended student reading and as sources for ongoing and future research. But the evidence was incomplete. On the other hand, academics interviewed during research undertaken for the review of *University Libraries in Africa*, on the whole did not show any special interest in Africa-published materials and did not consider them vital for teaching and research. They preferred to read and be read in Western journals. A number of librarians thought that their journal collections were not well used.

It was to fill this knowledge gap and to provide data on the use that is being made of African-published journals and their impact on the culture of research in Africa, that the present survey was undertaken. It is hoped that its results will guide both those concerned with the publication of journals in Africa (whether journal publishers or donors supporting such publication) and those concerned with providing access to them (whether through libraries, Internet or other modalities).

Aims and objectives

The aims of the survey were to:

- discover what use is made of African-published journals;
- evaluate their impact on research;
- compare the use made of African-published journals with those published elsewhere.

More specifically, the research aimed to examine, in the context of African universities and their libraries, the following questions:

- how often African-published journals are read;
- how the reading of African-published journals compares with the reading of those published elsewhere;
- why African-published journals are read/not read;
- why journals in general are read/not read;

- which journals are used most in teaching and research;
- to what extent and for what reasons African-published journals are used in teaching and research;
- how the teaching and research use of African-published journals compares with that of those published elsewhere;
- what sources and means are used to identify and acquire articles from African-published journals and those published elsewhere;
- what problems are faced in the use of journals and in particular African-published journals.

Methodology

Since the introduction of performance measurement in the evaluation of library services, a number of investigations have been attempted to determine the best method of evaluation of journal use and impact. However it has proved difficult to devise one satisfactory method. Journals taken from the library shelves for reading can be counted prior to re-shelving. This shows use but not the reasons for use. Information can be gathered from the citations given in student projects, postgraduate theses and the publications of academic staff. This will reveal journal articles that have been consulted; but often only quotations and not everything consulted are cited; in addition the value of a journal article to a piece of research may be inspirational rather than directly related. Finally questionnaires and interviews can be used to find out why journals are read, which are the most useful and how they might be more useful. Data gathered by one method complements and amplifies that gathered by other methods. Therefore it was decided to use a combination of all three methods in this survey.

Although journal collections in African universities have deteriorated over the last fifteen years, many libraries have more recently benefited from schemes donating journals titles or money to purchase journals from the West. Since 1994, a number of university libraries in Anglophone Africa have had access to titles published in the rest of Africa through the AJDP scheme. Because of their colonial past, all these libraries have been subject to the same historical, political and cultural factors with regard to education. It was therefore decided to undertake the survey in these universities and that a sample of two would achieve the necessary indicative results on journal use.

Because of financial and time considerations, it would not be possible to interview all academic staff in each of the universities. Yet to sample staff over all faculties would not provide reliable data on journal use, as research activities vary so much from person to person. It was therefore decided to aim at interviewing the complete population (up to a maximum of fifty in two faculties in each university), gathering in depth data from four broad subject areas. Again it was not feasible to record the use of journals in the libraries over a whole year. Instead it was decided to carry out hourly counts and analysis during one mid-semester week in each library.

Single surveys of journal use and impact may produce data which is peculiar to a particular time and group of people but which is not valid in general. There is a big turnover of staff in African universities. Research itself is a long and on-going process.

So that conclusions were more reliable and any trends in journal use could be determined, it was decided to carry out identical surveys over a three-year period.

As far as personnel were concerned, it would be necessary for local researchers to undertake the collection of data on journal use. Such expertise is most easily available in universities which house departments of library and information studies. It would then also be possible to integrate the collection of data into student projects. Additionally, it would be necessary to appoint a co-ordinator, who would design common instruments for data collection, supervise the local researchers, analyze data submitted and write the interim and final reports.

The methodology chosen was therefore:
In two African universities and repeated at yearly intervals over a period of three years
- an hourly count and identification (title, volume, number, date) of journals read in the university library over a one week mid-semester period;
- structured interviews with all academic staff within two faculties in each university to discuss their use of journals, both African and non-African, in teaching and research;
- an annual analysis of journal citations given in the undergraduate projects, postgraduate theses and academic staff publications (conference papers, research reports, journals articles, books) from the four chosen faculties;
- interim reports at the end of each year;
- a meeting of researchers to discuss the content of the final report;
- a final report containing findings over the three year period, conclusions and recommendations.

Data collection

Identification of universities and researchers

Diana Rosenberg, Head of Special Programmes at the International African Institute in London, UK undertook to co-ordinate the research. The Universities of Ghana (UGL) and Zambia (UNZA) were selected as the two research locations. Professor A. A. Alemna, Head of the Department of Library and Archival Studies at UGL and Mr Vitalicy Chifwepa, Head of the Department of Library and Information Studies at UNZA were appointed as the local researchers. Mr Chifwepa also worked with Ms Muyoyeta Simui, Serials and, from 1997, Special Collections Librarian.

The Faculties from which staff were interviewed and projects/publications were examined for journal citations were the Faculty of Arts and the Faculty of Social Studies at UGL and the School of Agricultural Sciences and the School of Medicine at UNZA.

The libraries of both universities have considerable journal collections and have benefited from journal support programmes, both of international and African-published journals. The count and analysis of journal use was undertaken in the Balme Library of UGL, supplemented with counts in the libraries of the School of Administration and the Institute of African Studies. In UNZA, the exercise was undertaken in the Main Library and the Medical Library, a branch serving the Faculty of Medicine.

Data collection instruments

The data collection instruments consisted of:

- Guidance Notes for Data Collection;
- Background Information;
- Interview Framework/Questionnaire for Academic Staff;
- Undergraduate Final Year Projects — Journal Citations;
- Postgraduate Theses — Journal Citations;
- Academic Staff Publications — Journal Citations;
- Library Count of Journals;
- Library Count of Journal Use: Summary.

Some changes to the instruments were made over the period of the research, in order to increase rates of return from academic staff and to improve data quality. In particular:

- guidance notes were clarified and expanded, to provide more detailed instructions on methodology and data collection;
- in 1997, a separate questionnaire was designed, so that it could be left with academic staff for self-completion, should an interview be impossible to arrange. In 1998, only questionnaires were used, as it was discovered that quality and depth of data generated by questionnaires was no different to that generated by interviews, whilst the response rate was better;
- in 1998, given their apparent low use, more in depth questions were asked about the use of information and communication technologies (ICT) in the identification and acquisition of journals;
- in 1998, staff were additionally asked to rate some responses in order of their importance;
- in 1998, questions were introduced about any changes in journal use or perceptions that had taken place over the period of the research.

Copies of the data collection instruments used in 1998 are in the Appendix.

Collection of data

Using the common instruments provided, data was collected during 1996, 1997 and 1998. In December of each year, researchers submitted the raw data to the co-ordinator, who analyzed it and prepared an interim report on findings for that year. In April 1999, the co-ordinator and researchers met in London for a two day meeting to discuss findings and agree on the content of the final report.

Background data

To provide the necessary background data, researchers were asked to submit:

- the number of current journals received by the university library, plus the number of titles and volumes of back files;
- a list of titles of current African-published journals received;
- a list of titles of back files of African-published journals.

Interviews/questionnaires

The total population of each Faculty or School was targeted. However, as the staff in the two UGL faculties numbered well over 50, it was decided to interview or send questionnaires to only 50, with these randomly selected but so as to represent all departments.

Response rates over the three years were as follows:

- *Faculty of Arts:* 40% (1996); 44% (1997); 44% (1998);
- *Faculty of Social Studies:* 66% (1996); 82% (1997); 70% (1998);
- *School of Agricultural Sciences:* 75% (1996); 47% (1997); 30% (1998);
- *School of Medicine*: 30% (1996); 50% (1997); 32% (1998).

Within faculties/schools, the majority of departments were represented each year. Although figures varied between faculties, of those completing questionnaires in 1998, on average 66% had also responded in 1997 and 44% in 1996. So the data collected each year provided a fair balance between new and previous respondents.

Journal citations

Undergraduate final year projects, postgraduate theses and academic staff publications that had been produced or published in the previous academic year were examined. Numbers for each year were as follows:

- *Faculty of Arts:*
  Undergraduate final year projects: 7 (1996); 3 (1997); 8 (1998)
  Postgraduate theses: 2 (1996); 10 (1997); 6 (1998)
  Academic staff publications: 17 (1996); 22 (1997); 8 (1998)

- *Faculty of Social Studies*:
  Undergraduate final year projects: 153 (1996); 156 (1997); 100 (1998)
  Postgraduate theses: 11 (1996); 28 (1997); 22 (1998)
  Academic staff publications: 51 (1996); 38 (1997); 39 (1998)

- *School of Agricultural Sciences:*
  Undergraduate final year projects: 17 (1996); 18 (1997); 21 (1998)
  Postgraduate theses: 6 (1996); 10 (1997); 6 (1998)
  Academic staff publications: 4 (1996); 8 (1997); 5 (1998)

- *School of Medicine*:
  Undergraduate final year projects: 46 (1996); 48 (1997); 0 (1998)
  Postgraduate theses: 0 (1996); 7 (1997); 25 (1998)
  Academic staff publications: 3 (1996); 8 (1997); 10 (1998)

Count of journal use

A library count of journal use was made for one full week in mid-semester each year. Originally it was planned for early November and this happened in 1996. In the succeeding years, there were slight variations caused by changes in semester dates.

Generally the counts were for 6 working days, Monday until Saturday. In 1998, the libraries at UNZA were also open on Sunday.

Problems and limitations

The main problem faced in both universities was lack of co-operation from academic staff. Many claimed that they had no time for interviews or for the completion of questionnaires. When researchers went to collect questionnaires left for completion, they found that staff had mislaid or lost them. At UNZA, the researcher found it difficult to find some staff in their offices, particularly those from the Faculty of Medicine who had clinical duties; others had disappeared on long leave or secondment. At UGL, staff complained at being asked to give information over a period of three years, saying that nothing had changed. The lack of co-operation explains the lowish response rates, even though in 1997 and 1998, a full six months was allowed for the process, so that adequate follow-up could be made. This is a pity, as end-user reactions, collected during the research, have provided much important data about the use of African-published journals, that is not available elsewhere.

Lack of academic staff co-operation could also affect the number of publications examined for journal citations. At UNZA the researcher had to rely on academic staff to hand over completed projects and theses. In 1998, no undergraduate projects in Medicine could be examined for this reason. In addition, not all departments or courses demand a final year project. At UGL, the number of students opting to complete projects as a part of their undergraduate degree continues to decrease.

Staff are also a little wary of giving information about their own publications, lest such information is used against them in the race for promotion. The fact that the researcher at UGL was, also, for the three years of the research, on the University's Appointments and Promotion Committee, placed him in an excellent position for monitoring staff publications. That may explain the greater number of staff publications produced in Ghana, although the bigger number of staff in the two faculties as opposed to the two in UNZA, must also be a factor. At UNZA, staff also complained about poor funding for research and low levels of staffing, which caused them to spend all their time on teaching duties.

Local researchers had difficulty supplying accurate information on journal titles, both current and back files, held by the university libraries. Lack of accurate local record keeping was the problem. It was also difficult to differentiate African-published journals from those with an African content, but published elsewhere, without actually inspecting the title, as this information was not included on the records. This led to apparent contradictions appearing in the research results, e.g. African-published journals being consulted in the library, but which were not on the original list of African-published titles held; or journals being counted as African-published when they were in fact Africana journals published in the Western world. However once this problem was recognized, researchers succeeded in providing much more accurate lists in 1997 and 1998. Current African-published titles were differentiated from back files and annotated with the

country of publication. This involved the researchers in a lot of extra work, as library records alone proved an inadequate source.

A major closure at UNZA in 1997 also proved a problem, as academic years were rescheduled. This interfered with the production of projects and theses and made it difficult to find academic staff for interviews or the completion of questionnaires. Library counts also had to be rescheduled, to ensure that they took place in mid-semester.

CHAPTER TWO

THE UNIVERSITIES AND THEIR LIBRARIES

Some knowledge of the structure, size and organization of the two universities in which the research took place and, in particular, of their libraries is necessary to fully understand the research findings and conclusions. The information which follows aims to provide that background and context.

University of Ghana

The oldest of Ghana's five universities, UGL was founded in 1948 as the University College of the Gold Coast and became an independent university in 1961. Its main campus lies 13 kilometres north-east of Accra at Legon. Only the Medical School is sited on a separate campus.

The academic life of the University is centred around seven Faculties: Agriculture, Arts, Law, Medicine, Science, Social Studies and Administration. Research took place in the Faculties of Arts and Social Studies. Arts has nine departments: Classics, Drama and Theatre Arts, English, Language Centre, Linguistics, Modern Languages, Mathematics, Music, Philosophy and Study of Religions. Social Studies has ten departments: Archaeology, Economics, Geography and Resource Development, History, Library and Archival Studies, Mathematics, Nursing, Political Science, Psychology and Sociology. There are also five research institutes and three schools: African Studies, Adult Education, Statistical, Social and Economic Research, Medical Research, Population Studies, Public Health, Communication Studies and Performing Arts. Teaching is at both undergraduate and postgraduate levels, including PhD.

Over the three years of the research, the student population rose from around 6,500 in 1996 to 10,000 in 1998. Academic staff numbers rose from 500 to 650.

The Balme Library (named after the first Principal of the University) is the Central Library of the University. There are also a number of affiliated libraries, for example the libraries at the School of Administration and the Institute of African Studies, which were included in the library count of journal use. The buildings of the library were opened in 1959 and designed to accommodate 350 readers and 250,000 books. The present estimated stock of the library is 585,075. The library desperately needs to extend its premises so as to seat at least 1,500 readers. New accessions, however, were less than 2,000 in 1998, and averaged at less than 3,000 over the last three years.

The expenditure of the library was in the region of US$ 32,000 in 1998. The majority of new books are donations and the library purchases no journals, apart from those published locally, from its institutional funding. In the future, the library hopes to generate income for the purchase of books and journals, by incorporating a user services fee into the student fee.

The library holds a total of 8,894 journal titles (97,428 volumes) (excluding newspapers, annual reports, yearbooks, pamphlet series, etc. but including newsletters and bulletins). Of these, 8,222 are now closed files. Of the closed files, 407 titles were published in Africa and, of these, 158 in Ghana. Some 200 titles relate directly to the arts and social sciences. Most of the closed files were published between the 1950s and the late 1970s and are representative of the whole of Africa, including Francophone and North Africa. A glance through the titles reveals that, in the period immediately after Independence, most countries in Africa published scholarly journals in each main academic area of study.

The number of current journals did not change over the period of the research. The library expected to receive around 670 journal titles, out of which 60 were published in Africa. Of this 60, 35 were published in Ghana and 28 were directly related to the arts and social sciences.

Between 1995 and 1998, the library received aid from the World Bank, which enabled them to subscribe to between 100 and 200 international journals. Now that the support has ended, there will be a sharp decrease in current journals. The AAAS CD-ROM project provided six databases on CD-ROM between 1994 and 1996. None of these subscriptions have since been renewed. Most of the current non-Ghanaian African-published journals are donated to the library through AJDP, starting in 1994.

The library does not make access to journals easy. There is no holdings list to which academics can refer. The only records are maintained on a Kardex, kept in the Periodicals Office. This is not frequently updated. There is no subject index to journals and files, although on open access, are in alphabetical order of title; the shelf order is poor. The library does not publicize new titles or new issues in any way. It appears that many of the World Bank titles were selected without departmental knowledge and academics therefore do not know that they are now available in the library.

African-published titles are not differentiated in any way. In 1998, the researcher examined the shelves of the Balme Library, to see which of the 32 journals distributed under AJDP were actually available for use. Only 17 titles could be located on the shelves and only 15 were on the library's lists of holdings. These 15 were not the same as the 17 found on the shelves. Some titles were located in the Periodicals Office, awaiting processing. Local journals are, however, available for sale in the University Bookshop.

Since 1996, the library has offered an e-mail service to staff and students. The library staff send and receive the messages. Users pay around the equivalent of 20 US cents on receipt of each e-mail. More recently, the library has established modems in departments, if so requested. In this case the departments pay a rental to the library. There is evidence to suggest that e-mail is not much used for academic purposes. CD-ROM services are only available in the library. Here there are four work stations, which in 1998 were in full working order. This number of work stations means that it is necessary to book ahead and sessions are limited to 30 minutes. Unfortunately all the CD-ROMs are now out of date, as subscriptions have not been renewed since 1996. In 1998 one of the World Bank's

virtual university sites was established at UGL. Academic staff and postgraduate students are allowed to use the Internet from this site, on an individual basis and on payment of a fee for each usage. From 1999, the library expects that it will also be able to offer access to the Internet.

One service the library continues to offer is inter-library loan, thanks to the IFLA/Danida project, which is underway. Document delivery both within and from outside of Ghana is being facilitated.

The library does not offer training to academic staff in the identification and use of journals and journal articles. When the CD-ROMs were first introduced, there was widespread marketing and publicity. But it was mainly students who attended the training sessions, whether these were in the library or in the departments. And training was not later provided for academic staff who were unable to attend the advertised sessions.

A feature of the University of Ghana in recent years has been the growth of departmental libraries. These are now well established in most departments and their independence is fiercely guarded. They are an important source of journals, as twinning arrangements and direct funding from outside agencies have allowed the acquisition of new and relevant titles, often more recent that those in the Balme Library. The Department of Library and Archival Studies has now agreed to train staff for these departmental libraries. It is however rare for a departmental library to have a holdings list of journals stocked and access is therefore restricted. Stocks of the libraries also depend on donor support and when projects end, so do the journals received by each library.

University of Zambia

The University of Zambia was created in 1965. It remained the only public university in Zambia until the Copperbelt University (previously a campus of UNZA from 1978) was established in 1987. The main campus of the university is in Lusaka on the Great East Road. Only the School of Medicine is separately sited at the Teaching Hospital on Nationalist Road in Lusaka.

There are nine schools in the university: Agricultural Sciences, Education, Engineering, Humanities and Social Sciences, Law, Medicine, Mines, Natural Science and Veterinary Medicine. Research was carried out in the Schools of Agricultural Sciences and Medicine. The School of Agricultural Sciences has six departments: Agricultural Economics, Agricultural Engineering, Agriculture, Animal Science, Crop Science and Soil Science. That of Medicine has eight: Community Medicine, Medicine, Nursing, Obstetrics and Gynaecology, Pathology, Physiological Sciences, Psychiatry and Surgery. Teaching is at both undergraduate and postgraduate levels.

In 1998, students numbered 4,306. This was an increase of almost 800 on 1996. The great majority of students are fulltime (as opposed to part-time or distance) and under 100 are studying at postgraduate level. In 1998, there were 221 students studying agriculture and 299 studying medicine. In 1997, the *Commission of Inquiry into the Operations of the University of Zambia and Copperbelt University* reported that UNZA had 470 academic

staff in post. This was well under the establishment of 646; there was a particular shortage of senior academic staff.

The university library is organized as a unified service. The Main University Library moved into its present building at the centre of the Great East Road campus in 1969. The building is designed to hold 300,000 volumes and to seat 1,600 readers. At present it is estimated that the library collection numbers 500,000 volumes. There are two branch libraries, serving the Schools of Medicine and of Veterinary Medicine.

According to the findings of the *Commission*, the University of Zambia has not allocated any funds to the library for the purchase of books and journals since 1993. Instead the library has had to depend on donations. Over these five years, an average per year of around 1,000 books and 240 journal subscriptions were donated. The library does not generate much income of its own. For the five years between 1993 and 1997, the total self-generated income amounted to about US$2,000.

The library holds a total of 2,725 titles (800,007 volumes) of journal back files. Most of these files are now closed; they started in the late 60s and early 70s and ceased soon thereafter. 144 of these are African-published titles, of which 33 were published in Zambia. 41 of the 144 relate to agriculture and medicine. Most of the non-Zambian journals come from neighbouring countries in Southern Africa.

In 1998, 398 titles were being currently received by the library. This was a slight increase on 1997. Out of these, 58 were published in Africa and of this 58, 10 were published in Zambia and 12 were directly related to agriculture and medicine. As at UGL, the majority (33 out of 48) of the current non-Zambian African-published journals are donated to the library through AJDP. The remainder are mostly from South Africa.

The library does provide a printed holdings list of journals. However there is no subject index and access is made more difficult at the Main Library as back files are on closed access. Although academics and postgraduates are allowed to enter this area, undergraduates must request the issue they want and they are only allowed one request at a time. (At the Medical Library, however, all journals are on open access.) The researcher also said that access was made more difficult by the fact that journals are not kept in good order and shelving is only carried out once a day. Journals are therefore often 'lost'. Those that have been used during the day or returned by members of staff (who are allowed to borrow three issues for three days) are not found on the shelves. The library does not offer any SDI or circulation of TOCs to academic staff. No special efforts are made to acquire or publicize African-published journals. (It is interesting to note that the only Zambian journal distributed through AJDP — *Quest* — is not acquired by the library.) It is not possible to tell from the holdings list which journals are published in Africa. However journals published in Zambia are available for purchase at the university bookshop.

E-mail was introduced to UNZA in 1991 and Internet access in 1994. A full campus network has been installed, which allows common access from all locations. Donor

agencies have been particularly active in providing computers at departmental level and there is a computer laboratory for students adjacent to (although not part of) the university library. Access to e-mail and the Internet is free of charge. The main university library is fully automated and is connected to e-mail and the Internet through the campus network. It has five workstations for CD-ROM. At the present time, however, the library's ICT facilities are limited. None of the CD-ROM subscriptions have been renewed since the AAAS project finished in 1996. The network connection to the Main University Library has not been working in 1998 and the fault has not yet been repaired. The Medical Library has been disconnected because of non-payment of the telephone bill. The library cannot offer any document delivery services, due to lack to funds.

As at UGL, the researcher reported that most departments have set up their own libraries, which acquire books and journals and also lend to students. The reasons given were that most departments were physically a long way from the Main University Library, as the campus is large, and that many academics feel that the library is poorly organized and does not meet their needs.

CHAPTER THREE

FINDINGS

Data was collected each year for three years (1996,1997,1998) by: interview/questionnaire with the academic staff in two faculties/schools in each university; an analysis of journals cited in projects, theses and academic staff publications from the same faculties/schools; and a count of journals used in the university libraries.

The findings presented in the tables, which follow, are the mean average of the findings of each of the three years. In some cases, data was only collected for one or two of the years and, where appropriate, this is indicated. Findings for UGL and UNZA are given separately, so that any differences in usage between arts/social sciences and applied sciences/medicine can be seen. In general, there was no significant difference between the yearly results. If there was any difference, this has been indicated.

Interviews/Questionnaires

The interviews held with academic staff and the questionnaires completed by them aimed to find out if and why journals were read, which titles were considered the most useful and how they might be made more useful. These issues were raised in the context of both journals in general and of journals published in Africa. Questions were asked on the importance of journal literature, identification and acquisition of journal articles and the ways in which journals assisted teaching and research. Titles of journals consulted regularly were requested. In addition academic staff were asked how they rated the importance of African-published journals and how such journals could be made more useful.

Additionally in 1998, staff were asked specifically about their use of ICT in identifying and obtaining journal articles and whether their perception of journals had changed over the three-year period of the research.

The percentages in the tables refer to the numbers of academic staff. Not all respondents answered all of the questions. Except where indicated, there was no significant difference between replies of academic staff from Arts and Social Studies at UGL and from Agricultural Sciences and Medicine at UNZA.

Importance

1. Journal literature is:

UGL	UNZA	
92%	95%	Important to current academic work (e.g. overwhelmingly because journals provide the latest information and explore the frontiers of knowledge in area of specialization; provide a means of sharing experiences)
56%	62%	More important than other types of literature (e.g. more current and accessible; concise and easily readable; more relevant; better methodologies)
40%	32%	Equally important as other types of literature (e.g. books are more useful for teaching; books provide overall theoretical frameworks; journals and books complement each other; research reports and archival material equally important in some subjects)
3%	6%	Less important than other types of literature (e.g. relevant journals not available; more authoritative information is found in textbooks)

There were some differences between the replies from the two faculties at UGL. In 1998, for example, 46% in Social Studies as opposed to 27% in Arts rated journals more important than other types of literature and 18% of those in Arts compared to none in Social Studies rated journals as less important.

2. African-published journals, compared to journals published elsewhere, are:

UGL	UNZA	
19%	18%	More important (e.g. provide necessary background information on Africa; relevant; articles are empirical)
49%	49%	Equally important (e.g. are complementary, in that they are specific to Africa, whilst Western journals discuss subjects theoretically and in general; easy to obtain if locally published)
26%	30%	Less important (e.g. not available; irregular; not very relevant; research is less focused and content less reliable; not raised by literature searches)

Some academics at both universities expressed difficulty in answering this question, because they felt that their access to African-published journals was too limited. Many of those who did comment, did so in the context of the potential importance of African-published journals, should they be published and available in relevant subject disciplines.

The point was made also at both universities that the most important research that is carried out in Africa is published in foreign journals and therefore local ones are not needed.

A difference between the two universities that could affect perception of journals is that UGL does not give equal weight to articles appearing in African-published journals for purposes of promotion. At UNZA all journals are recognized as equal. At UGL, some academics gave this as their reason for stating that Africa-published journals are less important.

Use made of journals
Titles
3. Journals most used are:

UGL	UNZA	
70%	77%	All non-African
2%	0%	Included three African titles
25%	22%	Included one or two African titles

Inclusion of African-published titles amongst those most used increased considerably over the years. Overall, the naming of all non-African journals fell from 84% in 1996 to 61% in 1998. Medical staff mostly favoured international journals. In 1998, only 9% included an African-published title in their list, compared to 67% in Agricultural Sciences. In some departments at UGL, the same African-published titles appeared in all lists of most-used journals, e.g. *African Journal of Library, Archives & Information Science* in the Department of Library and Archival Studies and *Ife Psychologia* in the Department of Psychology.

4. Regular consultation of African-published journals:

UGL	UNZA	
53%	64%	Two or three titles
29%	20%	One title
18%	14%	No titles
49%	53% (97/98)	Included one or more Ghanaian/Zambian titles

Some academics found it difficult to differentiate between journals published in Africa and those with an African content published elsewhere; some of their answers to the question on African-published titles had therefore to be discounted. Others continued to name African journals that had ceased publication, presumably because there was nothing to replace them.

The three Ghanaian journals most consulted were *Legon Journal of the Humanities*, *Research Review* of the Institute of African Studies, Legon and *Universitas*; because these were published by the University, they were easily available. Staff in Social Studies

consulted more African journals published outside of Ghana than did their colleagues in Arts (43% in Social Studies as compared to 73% in Arts named at least one Ghanaian journal in their selection of regularly used African-published journals).

In Zambia, all staff in Medicine consulted African-published journals. The most popular were *East African Medical Journal* and *South African Medical Journal*. In Agricultural Sciences, the *Zambian Journal of Agricultural Science*, produced in the School and free to members of the professional association, was usually included. The titles named did encompass the major journals being produced in Eastern and Southern Africa.

Purpose of journal use

5. Journal literature is used for:

In general		African		
UGL	UNZA	UGL	UNZA	
89%	95%	73%	78%	Ongoing and future research
90%	88%	61%	72%	Updating lecture notes
80%	43%	59%	41%	Recommended student reading
54% (97/98)	49% (97/98)	41% (97/98)	37% (97/98)	Basis of a lecture
14%	11%	13%	4%	Updating knowledge; access to recent research trends

Academic staff were asked to state why they used journals, both in teaching and research. Those in Social Studies tended to use journals in general, as well as African-published journals, more intensively and for a greater variety of purposes than their colleagues in Arts. Those in Medicine rarely used journals in teaching.

In 1998, staff were additionally asked to rate the reasons listed in order of their importance. At both UGL and UNZA, research was the most favoured (73% for journals in general, 63% for African-published), followed by updating of lecture notes (53% for journals in general, 43% for African-published). Far fewer staff gave recommended student reading as the primary reason (13% for journals in general, 17% for African-published).

Identification of journal articles

6. Relevant journal articles are identified through:

In general		African		
UGL	UNZA	UGL	UNZA	
76%	68%	48%	50%	References in other publications
61%	44%	53%	36%	Browsing the current issue
40%	66%	21%	32%	Current contents/indexing/abstracting services
32%	34%	37%	51%	Recommendation from colleague
18% (97/98)	34% (97/98)	17% (97/98)	37% (97/98)	Newsletter
4% (98)		0% (98)		Display in bookshops, at conferences, etc.
	0% (98)		10% (98)	Subscription
4%	7%	14%	10%	No way at all

At UGL, staff in Social Studies favoured the use of indexing and abstracting tools much more than their colleagues in Arts, both for journals in general and African-published journals. In 1998, 31% rated these as their primary method for identifying journal articles in general as opposed to 9% in Arts. (However the fact that the Faculty of Social Studies contains the Department of Library and Archival Studies — from which 9 staff returned questionnaires — is likely to cause a bias in this direction.) But, overall, references in other publications was rated the key identification tool (25%). At UNZA, it was medical staff who used indexing and abstracting tools, rather than staff in agricultural sciences. This accounts for the fact that this method was rated the most important means of identification (25%) for journals in general, followed by references in other publications (20%) and browsing (20%).

For African journals, receiving a recommendation from a colleague (33%) followed by browsing the current issue (22%), were rated as the primary means of identification at both universities. At UGL, 19% of staff felt that, more often than not, there was no way at all to identify articles in African-published journals.

Acquisition of journal articles

7. Journal articles are acquired through:

In general		African		
UGL	UNZA	UGL	UNZA	
65%	63%	49%	47%	University library
62%	46%	55%	46%	Personal contacts
42%	41%	35%	18%	Departmental library (if available)
33%	36%	32%	14%	Purchase of subscription
30%	50%	23%	37%	Other libraries, including subject networks
3%	4%	12%	16%	No way at all

It was acknowledged that the university library could no longer meet all needs and that it was therefore necessary to use a variety of methods to obtain journal articles. Departmental libraries were preferred to the university library when available and subject networks were also used by staff in Social Studies and Agricultural Sciences, e.g. AERC, CABI, ICRAF. (The exception was staff in Medicine who continued to rely heavily on the university library, but a university library which was a branch specifically serving their needs and therefore similar to a departmental library.)

At UGL, the use of the university library remained fairly static over the three years, whereas the use of other means of acquisition for journals in general rose as follows: departmental libraries from 26% in 1996 to 63% in 1998; personal contacts from 55% in 1996 to 77% in 1998; other libraries from 15% in 1996 to 46% in 1998.

At UGL, the method of acquisition rated as the most important in 1998 for both journals in general (37%) and African-published journals (32%) was personal contacts. Departmental libraries were equal with the university library for journals in general (19%) but preferred for African-published (26% cf. 18%). At UNZA, the primary method was the university library (35% for both types of journal), followed by personal contacts (30% for journals in general and 20% for African-published).

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Use of ICT

8. Identification of journal articles through electronic means (1998 only):

In general		African		
UGL	UNZA	UGL	UNZA	
9%	55%	0%	20%	Internet
25%	35%	7%	25%	CD-ROM
11%	35%	0%	15%	E-mail
64%	25%	91%	60%	None

9. Acquisition of journal articles through electronic means (1998 only):

In general		African		
UGL	UNZA	UGL	UNZA	
7%	50%	2%	15%	Internet
9%	35%	5%	10%	CD-ROM
11%	25%	5%	10%	E-mail
77%	20%	91%	65%	None

At UGL, the majority of staff in both faculties did not use electronic means, either to identify or obtain journal articles and, in particular, for journals published in Africa. Some staff indicated that their use of ICT was restricted to those times when they travelled out of Ghana and were able to visit other universities. Staff in Social Studies made greater use of the CD-ROM and e-mail facilities available in the main university library. (But, again, this result may be influenced by the closer contact with the library and professional knowledge of ICT enjoyed by staff from the Department of Library and Archival Studies.)

At UNZA, many more staff in Medicine than in the Agricultural Sciences used the Internet. Those who used electronic means pointed out that they were rarely able to identify or acquire articles from African-published journals by this method.

Improvements

10. Ways suggested to improve the usefulness of African-published journals are:

UGL	UNZA	
49% (97/98)	60% (97/98)	Better marketing and distribution by journals
40%	52%	More regular publication
40%	43%	Circulation of new issues or tables of contents to members of the academic staff
38% (98)	50% (98)	Establish a separate current contents, indexing or abstracting service for African-published journals
16% (96/98)	35% (96/98)	Better researched articles
25%	39%	Index and abstract in international databases
28% (96/97)	28% (96/97)	Make available in university/departmental library
13% (97/98)	39% (97/98)	Exercise better refereeing and editorial control

At UGL, staff in Arts favoured more regular publication and better researched articles; those in Social Studies rated improved marketing and the circulation of new issues and tables of contents as more important. It was interesting to note that only staff who used current contents/indexing/abstracting services to identify journal articles also rated the inclusion of articles from African-published journals in international databases as the most important improvement. Overall more regular publication (40%) was the improvement rated the highest, followed by the circulation of new issues or TOCs (23%).

At UNZA, staff in both Schools wanted to see more regular publication of African journals. Those in Agricultural Sciences favoured improved marketing, whilst those in Medicine rated better researched articles higher on their list of improvements. Overall better marketing and distribution (40%) was the improvement rated the highest, followed by a separate current contents or indexing service for African-published journals.

A few academics suggested that the answer would be to publish more journals in a greater variety of subject fields, but one respondent thought that the recent proliferation of journals, containing low quality articles, had affected general sustainability. Others suggested that Africans should be more encouraged to publish in African journals and that it would help if UGL authorities fully recognized these journals. A more general feeling was that journals should be subsidized to bring down prices and encourage personal subscriptions. Only one academic at each university proposed electronic publication.

Changes 1996/1998

11. Changes in importance, use, identification and access:

In general		African		
UGL	UNZA	UGL	UNZA	
				Importance
68%	70%	56%	55%	No change
14%	25%	26%	45%	More important in the future
9%	0%	11%	0%	More important
5%	5%	4%	0%	Less important
				Use
32%	45%	54%	60%	No change
49%	25%	23%	25%	More use
18%	25%	19%	10%	Less use
				Identification and access
33%	55%	49%	55%	No change
33%	15%	14%	5%	Easier
30%	25%	37%	35%	Harder

The situation, on the whole, had not changed. Use of journals in general had increased, because the World Bank and other donor projects had provided subscriptions. But it was pointed out that access and availability remained the key problems. If they were solved, then importance and use would increase. Many staff remained pessimistic and considered that identification and access had become harder over the last three years. For some, especially at UNZA, the introduction of electronic means during the past three years had gone some way to improving access. But staff in Medicine, in particular, (45%) were finding it increasingly difficult to obtain copies of journal articles.

Citation analysis

The analysis of citations was undertaken to give some indication of the extent to which journals and, in particular African-published journals, were used in research. The journal citations in undergraduate final year projects, postgraduate theses and academic staff publications (e.g. journal articles, books, research reports, conference papers) produced during each academic year were examined. Citations made were analyzed by journal title and number of times that an issue was cited. In 1997, dates of citations were also examined, so as to give an idea of the currency of journals being used in research. UGL provided this information in 1997 and both universities in 1998.

12. *Undergraduate final year projects*

UGL		UNZA		
Arts	Soc. St.	Ag. Sci.	Medicine	
2.6	6.2	3.6	3.2	Average number of journal citations per project
31%	26%	21%	24%	% of African-published journal citations
58%	82%	7%	16%	% of African-published journal citations which were Ghanaian/Zambian
30%	35%	15%	n/a	% of journal citations 1990+
38%	39%	0%	n/a	% of African-published journal citations, 1990+

13. *Postgraduate theses*

UGL		UNZA		
Arts	Soc. St.	Ag. Sci.	Medicine	
6.3	13.1	17	15.5	Average number of journal citations per project
37%	20%	5%	18%	% of African-published journal citations
66%	76%	27%	24%	% of African-published journal citations which were Ghanaian/Zambian
30%	25%	18%	71%	% of journal citations 1990+
20%	29%	33%	44%	% of African-published journal citations, 1990+

14. *Academic staff publications*

UGL		UNZA		
Arts	Soc. St.	Ag. Sci.	Medicine	
2.9	3.9	15.4	17.3	Average number of journal citations per project
26%	29%	7%	7%	% of African-published journal citations
61%	57%	1%	25%	% of African-published journal citations which were Ghanaian/Zambian
28%	33%	29%	68%	% of journal citations 1990+
37%	34%	100%	100%	% of African-published journal citations, 1990+

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Library count of journal use

The objective of the library count was to find out the extent to which journals were used on a daily basis and whether this use was of current issues or back files. A count was made of journals taken from the shelves and left on the reading tables at the end of each hour every day for one week each year. The titles, issue numbers and dates were noted so that African-published journals could be differentiated from non-African and current from back files.

15. *All journals*

UGL	UNZA Main Library	UNZA Medical Library	
88	55	23	Number of titles used during one week
119	86	80	Number of issues used during one week
130	121	279	Number of times a journal used during one week
75%	10%	41%	Percentage of issues used which were current (1996+)
22	19	45	Average number of times a journal used each day

16. *African-published journals*

UGL	UNZA Main Library	UNZA Medical Library	
9	7	3	Number of titles used during one week
12	8	17	Number of issues used during one week
13	10	62	Number of times a journal used during one week
39%	30%	57%	Percentage of issues used which were current (1996+)
2	2	12	Average number of times a journal used each day

Unlike the UGL and UNZA main libraries, usage in the Medical Library in both 1997 and 1998 concentrated on a small number of titles and issues, used many times. In 1997, 72 issues of the *British Journal of Surgery* were used 196 times during the week and 39 issues of the *East African Medical Journal* 118 times. In 1998, the most popular non-African journals were the *British Medical Journal*, *Lancet* and *Australian and New Zealand Journal of Surgery*. The two African titles used were the *East African Medical Journal* and the *Zambia Health Information Digest*. One issue of the latter was used 30 times.

CHAPTER FOUR

DISCUSSIONS AND CONCLUSIONS

Using the findings of the survey, it has proved possible to offer conclusions on:

- the use that is made of African-published journals in African universities, for teaching learning and research;
- the impact of African-published journals on research in African universities;
- the use of African-published journals compared to those published elsewhere;
- the role of African university libraries in journal provision;
- ICT and journal provision;
- changes in the use and impact of African-published journals, over the period of the research.

Use made of African-published journals

African-published journals are considered important to academic work, both in teaching and research. This finding is more positive than the views expressed by academics in interviews undertaken in 1995 for *University Libraries in Africa*. Then, on the whole, academics did not show any special interest in African material nor a recognition of the value of locally generated information and South-South information transfer.

The majority of staff (just under 70%) at both universities considered African-published journals equally or more important than journals published elsewhere, with most (49%) rating them equally important (Table 2). The reasons given were that journals published in Africa are contextual and the results presented and discussed are relevant to the African environment and conditions. Over 80% of staff consulted at least one African-published title regularly, with over half consulting two or three titles (Table 4).

African-published journals were heavily used to assist research, both ongoing research and in the identification of future research topics (73% at UGL and 78% at UNZA) (Table 5). At both universities, research was given by 61% of the staff in 1998 as the primary reason for using African-published journals.

As far as teaching was concerned, the journals were mostly used to update lecture notes and, to a lesser extent, as recommended reading for students and as a basis for a lecture (Table 5). The exception was that staff in Medicine at UNZA did not use journals, whether from Africa or elsewhere, a great deal in teaching.

These conclusions on the importance of African-published journals to the work of academic staff, and in particular to their research, apply equally to the humanities, social sciences and applied sciences.

The staff interviewed or returning questionnaires indicated that the importance of African-published journals to their work was limited by three main factors. And it was factors such as these that led to between 25% and 30% saying that African-published journals were less important to their work than journals published elsewhere. And which led some to state that their comments were made in the context of the *potential* importance of African-published journals.

• lack of knowledge

Staff admitted to not knowing what titles were published in Africa and whether there were any that were relevant to their subject interests. When listing African-published titles they consulted regularly, they often included titles published elsewhere with the word 'African' in the title. Some, who considered African-published journals as important, failed to be able to name any titles which they consulted regularly. Only a minority (in 1998, 23% at UGL and 30% at UNZA) could name titles which they had wanted to consult but failed; even then many of the titles named either did not exist, had long ceased publication, or were published elsewhere. "I hardly consult any African-published journals, because they are virtually non-existent" was typical of the comments made.

Locally published journals figured prominently in the titles regularly consulted: at UGL, 49% included one or more Ghanaian titles and at UNZA, 53% included one or more Zambian titles (Table 4). Of the African-published journals cited in UGL projects, theses and papers, 67% were published in Ghana (Tables 12 to 14). As one Ghanaian said "Apart from those published in Ghana, I do not even know what is available." It is little wonder that better marketing figured prominently in the improvements suggested to make African-published journals more useful. 49% at UGL and 60% at UNZA included better marketing and distribution among the most wanted improvements (Table 10). At UNZA, this was considered to be the improvement most needed. "African journals need to be highly promoted."

The ways which staff used to identify relevant journal articles were also unlikely to systematically increase their knowledge of what is published in Africa (Table 6). Recommendation from a colleague featured high on the list, as did references in other publications and browsing the current issue. Personal recommendation (33%) was ranked primary method used at both universities, followed by browsing the current issue (22%). At UGL, 14% of staff said that they had no way of identifying journal articles. Although current contents/indexing/abstracting services were used, their rating was comparatively low. And though used, it was pointed out that articles from African-published journals were rarely found in such services. Amongst the improvements (albeit not the most popular) suggested was the inclusion of African-published journals in international bibliographical databases and the establishment of a separate current contents, indexing or abstracting service for African-published journals (Table 10). The latter was more favoured at UNZA, where 20% of staff considered it to be the most needed improvement. It is interesting to note that the Africana Librarians' Council of the USA has also recognized this as a need and is considering consolidating indexes of Africana and, in

particular, articles published in African journals, to create a 'virtual catalogue' of African indexes.

• ***lack of access***
As one member of staff in the Department of Soil Science at UNZA said "Access and availability are the problem". Most staff felt that their access to African-published journals was very limited. Many different methods — university and departmental libraries, personal contacts, other libraries and subject networks — had to be used to acquire journal articles, with no one method appearing to be markedly more successful than another (Table 7).

There was a considerable reliance on personal contacts to supply needed articles; this method was used by 46% of staff at both universities (Table 7). In 1998, it was ranked highest at UGL (32%) and second highest at UNZA (20%). Such a method of access is not very reliable as a long-term solution. Significantly, 12% at UGL and 16% at UNZA said that they had no method at all through which to obtain articles from African-published journals.

Quite a few staff (32% at UGL and 14% at UNZA) claimed that they acquired African-published journals through personal subscriptions. Better and more targeted marketing by journals might well increase access and at the same time augment their subscription base and financial viability.

• ***shortcomings in the journals***
Some staff were also highly critical of the journals that were published in Africa, making comments like "They need to be more regular"; " Their coverage of subject matter is insufficient"; "Some of the quality of research is below standard"; "Some are not very well edited". These opinions were reflected in the improvements that were suggested (Table 10).

More regular publication was mentioned as one of the most needed improvements by 40% of those at UGL and 52% of those at UNZA; at UGL it was ranked the improvement favoured by the most staff (30%). The need for better researched articles was cited by 16% of those at UGL and 35% of those at UNZA, whilst the need for better refereeing and editorial control was included by 13% of those at UGL and 39% of those at UNZA. However, it should be said that some three staff made the point that "Availability and not quality was the problem".

Such findings are supported by those of *University Libraries in Africa*. There it was concluded that only a quantum leap in African publishing and distribution could reverse attitudes to local and African-published material.

Impact of African-published journals on research
A conclusion already made is that African-published journals are valued most of all for their research potential. In particular they are used to assist in on-going research, to identify possible topics of future research and to publish the results of completed

research. An indication of how much these journals are actually used can be found in the citations given in undergraduate projects, postgraduate theses and academic staff publications (Tables 12 to 14).

At UGL, in Arts and Social Studies, between 20% and 37% of journals citations came from African-published journals. At UNZA, figures were lower, between 5% and 24%. In Medicine, 24% of the citations in undergraduate projects and 18% in postgraduate theses came from African-published journals but only 7% in staff papers. In Agricultural Sciences, the figures were 21% in undergraduate projects, but only 5% in postgraduate projects and 7% in staff papers. Compared to the relative number of African-published journals available in the university libraries, their research usage is very high. At UGL only 5% of back files are African and only 9% of current titles. At UNZA, 5% of back files are African and 15% of current titles.

It has already been pointed out that locally produced journals featured highly in the citations, especially at UGL, where between 57% and 82% were from Ghana. In Zambia, local journals only amounted to between 1% and 27%. However the figures do relate to the stocks in the libraries: at UGL 39% of African-published back files are Ghanaian and 58% of current titles; at UNZA the corresponding figures are 23% and 17%. Staff and students therefore use what is available.

An average of around a third (actual percentages ranging from 0% to 100%) of all the African citations came from journals published from 1990 onwards. In Medicine the percentage was highest, as to be expected from a discipline relying on up to date information, and lower in the Arts, where more reliance is placed on historical data. One would have expected figures from Social Sciences and Agricultural Sciences to be more similar to those from Medicine, whereas they were comparable to Arts.

African-published journals do obviously play a significant part in research, but much less so in Agriculture and Medicine than in the Arts and Social Studies. This is surprising, in that all four subjects are contextual in nature; and given that approximately the same percentages of staff said that they considered African-published journals to be important to research.

The results of the citation analysis must also be viewed in the context that the amount of research being undertaken at African universities is now minimal and not often based on literature review. This can explain some of the low numbers of journal citations per publication. At undergraduate level, very few departments demand a research project as part of the degree. Where it is optional, as in many departments at UGL, very few undergraduates choose to submit. Academic staff at both universities stated that they could not undertake much research because it was difficult to get funding, teaching loads were too heavy and salaries so low that it was necessary to take other paid work, like consultancies, leaving little time for research. The use of journals is therefore lower than it might be, were the climate of research to improve.

Use of journals in general compared to African-published journals

The greater importance of non-African journals to teaching and research remains undisputed. As previously indicated, between 26% and 30% of academic staff deemed African-published journals to be less important (Table 2). In their lists of most used journals, between 70% and 77% named journals not published in Africa (Table 3). Moreover staff placed more importance on the role of non-African journals in their teaching and research (Table 5), e.g. for ongoing and future research (at UGL, 89% compared to 73%; at UNZA, 95% compared to 78%); for updating lecture notes (at UGL, 90% compared to 61%; at UNZA, 88% compared to 72%); for recommended student reading (at UGL, 80% compared to 59%; at UNZA, 43% compared to 41%).

This finding is backed by evidence from the *University Libraries in Africa* review. Academics, whilst wanting to see more African-published material, did not consider it vital for teaching and research.

And, in the libraries, the use was predominantly of non-African journals (85% at UGL, 92% at UNZA Main Library and 78% at UNZA Medical Library) (Tables 15 and 16). (However this usage is roughly in proportion to the numbers of non-African and African journals held by the libraries.)

One reason for the lesser use of African-published journals may be that staff found it much easier to identify and acquire articles from non-African journals. Although the same methods were used, all were less effective for those published in Africa (Tables 6 and 7). For identification of the articles, the use of systematic methods like current contents, indexing and abstracting services were far more productive for non-African journals and much favoured by staff in Social Studies and Medicine. Where African journals were concerned, staff were more reliant on the more haphazard method of waiting for a recommendation from a colleague. Articles from African-published journals were also much harder to obtain. Many more staff said that they had no way at all of obtaining articles from African-published journals (14%), compared to those published outside of Africa (4%).

Even so, comments such as "Most of the important articles about Africa appear in the known international journals" and therefore it is not necessary to consult African-published journals were rare (and made by just three respondents). Most staff considered that journals published in Africa were complementary to those published in the West and that each had a role to play. International journals were strong on theory and methodology, but only those from Africa could provide the coverage of subjects relevant to the continent and offer appropriate solutions to problems. Over the three years of the research, increasing numbers of staff included one or more African-published journals in their lists of the three journals most consulted on regular basis (34% at UGL in 1998 compared to 19% in 1996 and 35% at UNZA in 1998 compared to 13% in 1996). Some African-published journals appeared on almost everybody's list, within specific subject areas — for the Department of Library and Archival Studies it was the *African Journal of Library, Archives and Information Science*; for the Department of Psychology it was *Ife Psychologia*; for the Department of Soil Science it was the *South African Journal of*

Plants and Soil; for the Faculty of Medicine it was the *East African Medical Journal*. This shows that African-published journals, if directed towards a niche market, can successfully compete with those produced in the West.

A point made in 1998, and not in previous years, was that the attitude of university authorities to African-published journals can effect their use *vis à vis* other journals. The University of Ghana has official reservations about journals published in Africa and does not rate articles published in them as high as those published in overseas journals, for the purposes of promotion. This has led to an acceptance by staff that African-published journals are not so important. The opposite is true at UNZA, where the authorities give equal recognition and senior staff promote their use. These attitudes have encouraged staff to read such journals and publish their work in them.

The Ghanaian attitude to local publication is not unusual. The pamphlet *Scientific Journals published in Developing Countries?* describes how some countries in the developing world carry out assessments of their journals, so as to identify those that can properly be called 'journals of the international level'. These are then officially supported and publication in them is an indicator of 'quality' of research. What this attitude ignores is that local journals constitute (or should constitute) in many cases the natural channels for the publication of research relevant and valuable to the country concerned but not necessarily of interest to the main clients of research worldwide. Certainly academics interviewed during the present research clearly recognized that a diversity of journals must be produced and promoted, in order to respond to a variety of requirements and the interests of readers. It is dangerous to adopt and apply measuring standards defined abroad, regardless of whether they correctly measure performance according local objectives, needs and conditions. Those in charge of African universities need to revise the criteria they use to assess and support local publications.

Libraries and their role in journal provision

Both the libraries have extensive back files of journals and, in recent years (thanks to donor support) have much improved their holdings of current titles (670, out of which 60 are African-published, at UGL and 398, out of which 58 are African-published, at UNZA). Given that over 90% of academic staff considered journal literature in general to be of key importance to their work, over half considered journals to be more important than other types of literature and only some 5% considered journals to be less important (Table 1) one would have expected journal usage in the university libraries to be high.

Yet these periodicals were not well used (Table 15). Usage figures remained much the same or showed a slight decrease over the three years. At UGL (where staff numbers averaged 575 and students 8,250 over the three years), 88 titles were used 130 times in a week, an average of 22 times a day. This means that the use per student *per annum* was less than one. The researcher himself has noted that the Periodicals Room is mostly used by students for consulting their class notes. At UNZA (where the potential clientele is much smaller with an average over the three years of 470 staff and 3,906 students), in the Main Library 55 titles were used 121 times, an average of 19 times a day. At the Medical Library (with a student clientele of around 230), usage was healthier with 23 titles being

used 279 times during the week. Here fewer titles were used more times. At UGL the titles used are mostly current. At the Medical Library, usage was almost evenly split between current and back files, whilst at UNZA Main Library, back files made up 90% of the usage.

These figures are in accord with the answers provided by staff as to how they acquired journal articles (Table 7). The university library remained an important method, but it was not the only method and not necessarily the major method. Personal contacts were used almost as much. Departmental libraries were preferred to the university library where available and subject networks were also used by staff in Social Studies and Agricultural Sciences. At UGL, the trend was to use means other than the university library more and more. Making journals available in the university library did not appear high on the list ways to improve the usefulness of African-published journals (Table 10).

Nor was the university library necessarily ranked as the primary method of journal acquisition. In 1998 at UGL, 37% gave personal contacts as their primary method and only 19% named the university library. Staff in Agriculture (78%) preferred to use departmental libraries. Only in Medicine did staff (82%) continue to use the university library as their main method of access (and this library was a branch one and therefore somewhat similar to a departmental library).

The university library has always been just one of several sources of information available to the academic community. And the growth of ICT has opened up many more pathways of information flow. But comments made by staff at the end of the questionnaire indicated that they felt let down by their university libraries and that it was the failure of the libraries to obtain and make the journals they needed available that has led them to seek other ways of access. They still hoped that their libraries will be able to order more journals, both general and African. At the same time, the point was made that just one copy in the library of an essential journal (like *BMJ* or *Lancet*) was not enough; copies also needed to be available at departmental level. The marginalization of the university library in Africa, the growth of departmental libraries and the increasing adoption by academics of alternative ways to obtain information was also one of the main conclusions of *University Libraries in Africa*. University libraries need to re-define their role in journal provision.

As has been indicated, staff felt that their lack of knowledge about African-published journals was crucial to their being unable to make more use of this resource. The university library could play a role here. One useful means of promotion would be the circulation of new issues or tables of contents. Overall over 40% of staff favoured this and those in Social Studies ranked it as the second most important improvement. In fact, libraries could do much more to make academics aware of what titles are published in Africa, for example by publicizing the various indexing tools that are available and the titles which the library holds. Academics did not seem aware of the indexing tools for African-published journals that do exist, e.g. the *APEX Catalogue*, *Index of South African Periodicals* (now available on CD-ROM and the Internet), *Quarterly Index to Periodical Literature, Eastern and Southern Africa*, *African Journals Online*. They were also not

aware of what titles were held by their own library. The failure of librarians to recognize the importance of African-published material and to promote its use was also pointed out in *University Libraries in Africa*.

Librarians have a duty to ensure that the money spent on journals, whether by their own institutions or by donors, is reflected in journal use. This means that they need to organize their collections more efficiently and effectively and promote use through exhibitions and publicity. Holdings lists need to be maintained and easily accessible by users. Subscriptions provided at departmental level need to be catalogued so that they are more widely known throughout the university and are co-ordinated with holdings at university level. Journal usage needs to be monitored. For example the finding that only 25% of the journal usage at UGL is of pre-1990 journals questions the need to hold so many long runs of back files.

ICT and journal provision

Introduction of ICT has followed different timing and patterns at UGL and UNZA. In the latter university, e-mail was introduced in 1993, followed by Internet connectivity in 1994. There is a university-wide network. CD-ROM searches have been available in the libraries only at both UNZA and UGL since 1994. At UGL, ICT has been a later introduction and much more limited. E-mail services have been offered since 1996, through the Balme Library. The library has extended e-mail to some, but not all, departments, at their request. Internet connectivity did not arrive until a branch of the World Bank's Virtual University was set up in 1998. This is restricted service at the moment.

Journal articles can be identified and acquired quickly through these means. The data gathered in 1996 and 1997 revealed a low (but increasing) usage of ICT, especially at UGL. Only in the School of Medicine, did staff make regular use of the new technologies. In 1998, it was decided to ask separate questions on the use of ICT in the identification and acquisition of journal articles, so as to provide a more complete picture (Tables 8 and 9).

Although usage again increased in 1998 (there was an increase of around 10% between the 1996 and 1998 figures), it was still low, especially for African-published journal articles. At UGL, 64% of staff never used ICT for the identification of journal articles and 77% never used ICT for their acquisition. For African-published journals, the figures were lower, 91% in both categories. And the figures from UGL would have been even lower, without the inclusion of staff from the Department of Library and Archival Studies, where all (bar one) used ICT. At UNZA the figures were higher, particularly for staff in Medicine. Only between 20% and 25% did not use ICT, although for African-published journals, the figure rose to between 60% and 65%.

At UGL, CD-ROM was the most popular tool for the identification of journals articles and e-mail for acquisition: "I use e-mail to obtain free copies of articles from their authors, if they will oblige"; "I simply send e-mails to friends in America or Europe to send me photocopies of articles desired". Internet was not much used and often only

when outside of Ghana: "I use Internet as and when opportunities arise for travelling overseas". In comparison, at UNZA, where there had been connectivity since 1994, Internet and the Web were the most used of the electronic media, by between 50% and 55%. Medical staff regularly consulted *MEDLINE*, *PubMed* and *BMJ* in this way. A soil scientist subscribed to *SoilChem*. E-mail was used to acquire articles through subject networks (like ICRAF), through professional bodies (like the Royal College of Psychiatrists) and through personal contacts. Staff would have liked to be able to find more full text services on the Internet. The evidence is that once the Internet becomes available, it is used more than other electronic means for journal access.

At both universities (and the statistics bear this out), staff pointed out that ICT was not a great deal of help for identifying and obtaining articles appearing in African-published journals. Staff made comments like: "I do not find African journal articles in the CD-ROM services"; "It is rare to find an abstract of an African journal article"; "No African articles are available on the Internet". One staff member in Medicine said that he now relied on the Internet and, therefore, would only use African-published journals if they were abstracted in *PubMed*. Those who used ICT favoured either a separate indexing service for African-published journals or their inclusion in international databases: "Inclusion of African journals on the Internet will make it easier to access information"; "For someone who only uses the Internet, it is important for African journals to be included in international databases".

The reasons given by staff for not using ICT reveal that lack of know-how and lack of easy access remain the key problems. Some staff said that they were not yet computer literate and were not yet familiar with the new technologies. Just having facilities in the library was not enough. What was wanted was access at departmental level, so that facilities were freely available whenever needed. Library facilities were criticized in that one had to queue to use them, hardware was frequently broken down, CD-ROMs were out of date and e-mail not reliable. Cost was also mentioned as a factor restricting use at UGL; there staff pay for e-mail and Internet services. Those at UNZA who used the Internet and e-mail, all said that they used departmental or personal facilities. It was generally agreed that "access must be at office level". The researcher at UNZA confirmed that it was only when e-mail and the Internet became available at office level that it began to be widely used. This conclusion is supported by evidence provided by the recent CHEMS survey on Internet and e-mail access in Commonwealth universities. In that publication, the frustration experienced when access is limited to a few common terminals within an institution are graphically described.

But although staff at UGL criticized the monopoly that the library seemed to have on ICT and thought that this limited its use, at the same time they thought that libraries should have a training and facilitating role. In the past, the few hours that the library had offered on CD-ROM training had not been enough and had not been followed up. In future, librarians needed to play much more of an active training role "going round department to department to educate the academic staff on how to access information on the facilities that were available". It goes without saying that hardware and software once introduced need to be maintained and kept up to date.

Changes in use and impact of African-published journals

In 1997, it was reported that the data showed an overall increase over 1996 in journal use and, more significantly, a marked increase in the importance being placed on African-published journals.

The figures for 1998 did not show the same sort of increase. In some cases there were marginal increases, in some cases decreases and in most cases they remained much the same, whether for journals in general or those published in Africa.

For example, 35% of staff, compared to 18% in 1997, considered African-published journals to be less important than journals in general and, in the libraries, only 12 African-published titles were used compared to 33 in 1997. At the same time awareness of and use of such journals showed some increase. 35% of staff included at least one African title amongst their most consulted journals compared to 23% in 1997 and 16% in 1996.

For most staff, the importance of African journals to their work and their use of them had not changed over the past three years (Table 11). Where staff did indicate changes had taken place, these had to do with availability and access. The same problems were faced with all journals, but to a higher degree with those published in Africa.

Importance could increase in the future if access improved. Use depended on the ease with which journals could be identified and obtained and many staff found that this was getting harder not easier. "They are less important, because there is less access"; "Having more African-published journals with African experiences would be beneficial to African scholars and researchers"; "African journals are not easy to obtain; their importance may increase if more are available"; "Access is the problem — they are irregularly published, few copies are available and it is difficult to obtain individual copies"; "My research is focussed on Africa and I need more information. But African journals are harder to identify and obtain". Some academics recognized the growing importance of the Internet in the identification and acquisition of journals; if journals emanating from Africa did not publish online, then they would be less used.

CHAPTER FIVE

RECOMMENDATIONS

This study has shown that, although useful and wanted, African-published journals will not attain their full impact on teaching and research in African universities, unless they become more easily accessible and more readily available. African academics have to know what is being published in their subject areas. What is being published needs to be more regular and of better quality. There needs to be reliable and systematic channels for obtaining the required journals and journal articles. It is with these conclusions in mind that the following recommendations are made, all in the context of maximizing journal use in African universities and, in particular, the use of journals published in Africa.

To African University Librarians

- promote library holdings of African-published journals:
  - take out subscriptions and ensure that there is a good balance between foreign and African titles and between those published locally and in other African countries;
  - hold exhibitions of African-published journals;
  - circulate tables of contents of new issues and offer selective dissemination of journal articles to academic staff;
  - encourage the use of journal collections, by providing publicly-available holdings lists of journals by title, subject and country of publication and by ensuring ease of access through the immediate display of new issues and the regular and accurate shelving of previous issues.

- promote knowledge of African-published journals:
  - train academic staff and students in the tools which identify titles of journals and articles within the journals;
  - for students, include such training in orientation programmes;
  - for academic staff, offer training on a one-to-one basis.

- advise and assist in the creation of tools for the indexing and abstracting of African-published journals and assist in pressing for their inclusion in international indexing and abstracting databases.

- monitor usage of journals in the library, so as to know which are used and which might be discontinued or withdrawn and in what areas further marketing is required.

- recognize that academic staff acquire journals and journal articles from many different sources, not just from the university library, and undertake co-ordination of these sources within the university so as to ensure maximum access and availability, e.g. by assisting in the organization of departmental libraries; by including the holdings of departmental libraries in journal holdings list.

To African Library and Information Science Educators

- include information on African-published journals and their bibliographical searching tools in all professional training courses.

- improve the teaching of journal collection management in academic libraries, with a view to maximising usage of journals by staff and students.

To African Academics and Researchers

- use African-published journals for the dissemination of research findings, especially those appropriate and valuable to African countries.

- recognize that many relevant journals are published in Africa, outside of the home country, and make an effort to find out, read and contribute to what is available.

- make more use of African-published journals in teaching, in order to introduce a knowledge of them to students from undergraduate level onwards.

To African Journal Publishers

- improve journal management and ensure that issues are produced regularly and on schedule, so as to engender and retain confidence in the journal.

- improve marketing and promotion by:
  - targeting both institutional (libraries, faculties/schools, departments) and personal subscribers;
  - pressing for inclusion in all relevant current contents, indexing and abstracting tools, local as well as international;
  - following legal deposit regulations, so as to appear in national bibliographies;
  - taking advantage of co-operative marketing ventures, e.g. APEX, book fairs, etc.

- improve production quality (paper, print, design and binding).

- improve content quality by:
- better editing and copy editing;
- using peer review;
- including only well-researched papers;
- commissioning articles;
- having an international circulation.

- recognize that journal publication worldwide is moving from print to online and that every journal should aim to have some presence on the Web, even if this is through the online services of a third party.

- recognize that journals which target a niche subject area, previously not covered, are the ones that are likely to succeed on an all-Africa basis.

To ICT Providers in Africa (including donor agencies as well as university administrations, libraries, computer centres, etc.)

- provide Internet access in all universities, as it is now an essential means of identifying and acquiring journal articles.

- recognize that if ICT is to be used effectively by academic staff, access must be spread throughout the university, preferably at departmental and office level.

- provide training to academic staff in the use of ICT on an ongoing and one-to-one basis, so as to overcome the prevailing lack of know-how.

- initially provide ICT services free of charge at the user level, to encourage take-up.

- ensure that there are sufficient funds available on an annual basis for the maintenance of hardware, networks, online subscriptions, CD-ROM renewals, etc. ICT is only useful if connectivity is always there.

To African University Administrators

- recognize the worth of African-published journals and their special role in creating and maintaining the African academic enterprise, by giving consideration to the inclusion of publication in local journals amongst the criteria for staff promotion.

- recognize that the publication in local journals of articles based on quality research depends on there being sufficient funding and adequate facilities within the university to enable academic staff to carry out the necessary research.

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APPENDIX

DATA COLLECTION INSTRUMENTS 1998

A. GUIDANCE NOTES ON DATA COLLECTION

1. Background information

- before proceeding with data collection, complete and submit the background information form. Very full information was provided by both libraries in 1997. However I suggest that you may like to revisit the titles of current and back files of African journals, remembering to include the country of publication in brackets after the title. For journals in general, check the number of current titles taken. Some may have been cancelled or added during the year.

  So that numbers are comparable between universities, please exclude newspapers, annual reports, yearbooks, series, calendars, prospectuses, etc. What we want to count are journals and newsletters.

2. Self-completion questionnaire

This year only self-completion questionnaires will be used to collect data from academic staff.

- ensure the completion of a questionnaire by ***all*** the academic staff in two faculties, i.e. approximately 50 staff per faculty. If the staff of a chosen faculty is greater in number than 50, then select 50 staff, representative of all departments within the faculty, as your population. NB. The target is ***total*** population;

- to maximize the number of returns, allow a full six months, from March to September, for delivery and completion of the questionnaires. This should allow for the capture of those away on short study leaves and of those with heavy work loads;

- prepare a list of all staff who have been given questionnaires and submit this list together with completed forms;

- prior to questionnaire distribution, ask for authority from Deans and Heads of Department;

- although the questionnaire includes an introduction explaining the nature of the research, try to deliver and collect it personally. Explain the purpose of the research project, the way in which the annual collection of data is enabling us to monitor changes in journal use and how it is hoped to use the results to improve the publication, availability and use made of African-published journals. Describe some of the findings to date and promise to give those completing the questionnaire details of the final

report. On collection of the report, assist those who may have had some problems in its completion and clarify any queries about question meanings, etc.

3. Journal citation

- carry out an analysis of the journal citations given over the past twelve months in three types of materials produced in the same faculties (or departments) in which the interviews were made:
    - undergraduate final year projects
    - postgraduate theses
    - academic staff publications (e.g. journals articles, books, research reports, conference papers, etc.)

  There is a summary data collection form for each type of material. The process of analysis is probably best made by preparing a 5" x 3" slip of paper for each new citation found and then marking the number of times it is cited within that type of publication. Please include volumes, parts and years for all citations and list in alphabetical order;

- the date of the citation analysis (June) is aimed to coincide with the end of the academic year. However the actual month is ***not*** important, so long as only publications of ***one*** previous year are analyzed and so long as there is no overlap with citations already submitted;

- if the materials to be analyzed are not already collected by the library, then it will be necessary to identify and collect the publications from departments and individual staff. Use all possible methods, e.g. request details when delivering the questionnaire, examine applications for appointments and promotions, check local journals.

4. Library count of journal use

- the library count is of all journals in all libraries in the university system, which hold periodical collections;

- the date of the library count is aimed to be in the middle of a teaching term or semester. Mid-November is recommended, since this was the time it was done in 1996 and 1997. However if semester times have been varied, carry out in the middle of the teaching semester for the faculty concerned;

- identify and count all journals (current issues and back files) left on reading tables at the end of each hour every day for one week and then immediately re-shelve. Enter the information on the form provided. At the end of the week, enter the cumulative figures on the summary form;

- if journals are loaned, then identify and count those in the issue at the end of the week and add to the summary form;

- ensure that readers do not re-shelve journals, e.g. by placing prominent notices on the tables or by giving users this instruction as they enter the library;

- for the data collection, it may be most appropriate to recruit members of the library staff to undertake the identification, counting and re-shelving of journals. In this case provide adequate training and supervision.

B. BACKGROUND INFORMATION

University Library:

Date:

PART ONE: CURRENT JOURNALS
(Include newsletters; include subscriptions and donations; exclude newspapers, annual reports, yearbooks, series, calendars, prospectuses, etc.)

Number of current journals (including African-published):

Titles of African-published current journals:
(List below in alphabetical order and include country of publication in brackets after the title)

PART TWO: JOURNAL HOLDINGS
(Include newsletters; include subscriptions and donations; exclude newspapers, annual reports, yearbooks, series, calendars, prospectuses, etc.)

Number of journal titles with back files (including African-published):

Number of volumes of journal back files (including African-published):

Back files of African-published journals:
(List titles below in alphabetical order. Indicate the years of the back files and include country of publication in brackets after the title)

C. QUESTIONNAIRE FOR ACADEMIC STAFF

In answering this questionnaire, you will be providing data for a research project which is examining and evaluating the use that is being made of African-published journals. The data collection is taking place every three years in two African universities, University of Ghana in Legon and University of Zambia. The broad objectives of the survey are to discover the use being made of African-published journals; to evaluate their impact on research; and to compare the use made of African and non-African journals. It is hoped that the results of the survey will provide insights into the relationship between indigenous publication and African scholarship and suggest ways of improving the publication, availability and use made of African-published journals.

In 1998, the final year of the research, you are being asked to complete a questionnaire. All information will be treated in confidence. The results of the research will be circulated to you in 1999. We very much appreciate your assistance and co-operation. Thank you!

PART ONE: BACKGROUND INFORMATION

University:

Faculty: Department:

Name: Post:

Were you interviewed or did you complete a questionnaire in connection with this research: in 1996? Yes ❑ No ❑ in 1997? Yes ❑ No ❑

Date on which you are completing this questionnaire:

PART TWO: JOURNALS IN GENERAL

1. Is journal literature important to your current academic work? *(Tick)*
   Yes ❑ No ❑ Partly ❑

Give reasons for your answer:

2. How do you rate the importance of journal literature to your work compared to other types of literature? *(Tick)*
   More ❑ Equally ❑ Less ❑

Give reasons for your answer:

3. Name the titles of journals (up to three) which you consult the most:

4. In what ways do these journals assist you in your ***teaching***? *(Rank ways, in order of their importance, by writing the numbers 1,2,3 in the boxes provided)*

Basis of a lecture ❑
Recommended reading for students ❑
Updating notes ❑
Other (please name the way) ❑

5. In what ways do these journals assist you in your ***research***? *(Rank ways, in order of their importance, by writing the numbers 1,2,3 in the boxes provided)*

Contribution to ongoing research ❑
Future research topic ❑
Other (please name the way) ❑

6. How do you ***identify*** which journal or journal article you need to read? *(Rank methods, in order of their importance, by writing the numbers 1,2,3,4 in the boxes provided)*

Current issue on display in the Library ❑
Current contents service ❑
Indexing/abstracting service ❑
Reference found in another publication ❑
Newsletter ❑
Personal contact ❑
No method ❑
Other (please name the method) ❑

7. Do you use electronic means (e.g. Internet, CD-ROM, e-mail) to ***identify*** a journal or journal article you wish to read? *(Tick)*

Internet ❑
CD-ROM ❑
E-mail ❑
Other (please name) ❑

If so, give full details:

If not, give reasons:

8. How do you ***obtain*** the journal articles you want to read? *(Rank methods, in order of their importance, by writing the numbers 1,2,3,4 in the boxes provided)*

University Library	❑
Departmental Library	❑
Another library	❑
Subject network	❑
Purchase	❑
Personal contact	❑
No method	❑
Other (please name the method)	❑

9. Do you use electronic means (e.g. Internet, CD-ROM, e-mail) to ***obtain*** a journal or journal article you wish to read? *(Tick)*

Internet	❑
CD-ROM	❑
E-mail	❑
Other (please name)	❑

If so, give full details:

If not, give reasons:

PART THREE: AFRICAN-PUBLISHED JOURNALS

10. How do you rate the importance to your academic work of journals published in Africa compared to those published elsewhere? *(Tick)*

More ❑ Equally ❑ Less ❑

Give reasons for your answer:

11. Name titles of journals published in Africa which you consult regularly:

12. In what ways do these journals assist you in your ***teaching***? *(Rank ways, in order of their importance, by writing the numbers 1,2,3 in the boxes provided)*

Basis of a lecture	❑
Recommended reading for students	❑
Updating notes	❑
Other (please name the way)	❑

13. In what ways do these journals assist you in your ***research***? *(Rank ways, in order of their importance, by writing the numbers 1,2,3 in the boxes provided)*

Contribution to ongoing research	❑
Future research topic	❑
Other (please name the way)	❑

14. How do you ***identify*** an African-published journal or article in an African-published journal which you need to read? *(Rank methods, in order of their importance, by writing the numbers 1,2,3,4 in the boxes provided)*

Current issue on display in the Library	❑
Current contents service	❑
Indexing/abstracting service	❑
Reference found in another publication	❑
Newsletter	❑
Personal contact	❑
No method	❑
Other (please name the method)	❑

15. Do you use electronic means (e.g. Internet, CD-ROM, e-mail) to ***identify*** an African-published journal or journal article you wish to read? *(Tick box)*

Internet	❑
CD-ROM	❑
E-mail	❑
Other (please name)	❑

If so, give full details:

If not, give reasons:

16. How do you ***obtain*** articles from African-published journals? *(Rank methods, in order of their importance, by writing the numbers 1,2,3,4 in the boxes provided)*

University Library ❑
Departmental Library ❑
Another library ❑
Subject network ❑
Purchase ❑
Personal contact ❑
No method ❑
Other (please name the method) ❑

17. Do you use electronic means (e.g. Internet, CD-ROM, e-mail) to ***obtain*** an African-published journal or journal article you wish to read? *(Tick box)*

Internet ❑
CD-ROM ❑
E-mail ❑
Other (please name) ❑

If so, give full details:
If not, give reasons:

18. Name the title of any African-published journal(s) which you would like to consult, but which you have not been able to obtain:

19. In what ways could journals published in Africa be made more useful to your teaching or research? *(Rank methods, in order of their importance, by writing the numbers 1,2,3,4 in the boxes provided)*

Improved marketing to increase awareness of existence ❑
Inclusion in international current contents/indexing/abstracting databases ❑
Current contents/indexing/abstracting service for African journals ❑
More regular publication ❑
Better researched articles ❑
Better refereeing/editorial control ❑
Circulation of new issues, table of contents, etc. to academic staff ❑
Other, i.e. ❑

PART FOUR: THE FUTURE

20. Do you consider that your perception of the importance of journal literature to your academic work has changed over the last three years or is likely to change in the future? Give reasons for your answer.

21. Do you consider that your perception of the importance of African-published journal literature to your academic work has changed over the last three years or is likely to change in the future? Give details.

22. Do you consider that your actual use of journal literature has increased over the past three years? *(Tick box)*

Journals in general: More ❑ Less ❑ Same ❑

African-published: More ❑ Less ❑ Same ❑

Give reasons for your answer:

23. Over the past three years, have you found it easier or harder to identify and obtain the journal articles that you want to read?

Journals in general: Easier ❑ Harder ❑ Same ❑

African-published: Easier ❑ Harder ❑ Same ❑

Give reasons for your answer:

PART FIVE: YOUR VIEWS AND OPINIONS

24. Any other comments:

D. UNDERGRADUATE FINAL YEAR PROJECTS — JOURNAL CITATIONS

University:

Faculty:

Department:

Year: 199 to 199 *(state month as well as year)*

Number of projects analyzed:

	Title of journal, volume (part), year	**No. of citations**
African	**(in alphabetical order and including country of publication)**	
Non-African	**(in alphabetical order)**	

E. POSTGRADUATE THESES — JOURNAL CITATIONS

University:

Faculty:

Department:

Year: 199 to 199 *(state month as well as year)*

Number of theses analyzed:

	Title of journal, volume (part), year	**No. of citations**
African	**(In alphabetical order and including country of publication)**	
Non-African	**(in alphabetical order)**	

F. ACADEMIC STAFF PUBLICATIONS — JOURNAL CITATIONS

University:

Faculty:

Department:

Year: 199 to 199 *(state month as well as year)*

Number of publications analyzed:

	Title of journal, volume (part), year	**No. of citations**
African	**(in alphabetical order and including country of publication)**	
Non-African	**(in alphabetical order)**	

G. LIBRARY COUNT OF JOURNAL USE

University:

Library:

Day, month and year: Day of week:

Time of count: AM / PM

Title of journal	Year	Volume	Part

H. LIBRARY COUNT OF JOURNAL USE: SUMMARY

University:

Library:

Week of count: from Monday, • 199 to Sunday, 199

	Title of journal	Year	Vol.	Part	No. of times used
African	(in alphabetical order)				

	Title of journal	Year	Vol.	Part	No. of times used
Non-African	(in alphabetical order)				

DFID Department for International Development

Department For International Development
94 Victoria Street
London SW1E 5JL

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